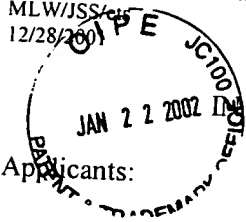


12/28/2001



THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Michael J. Jones and Paul Viola

Application No.:

09/992,795

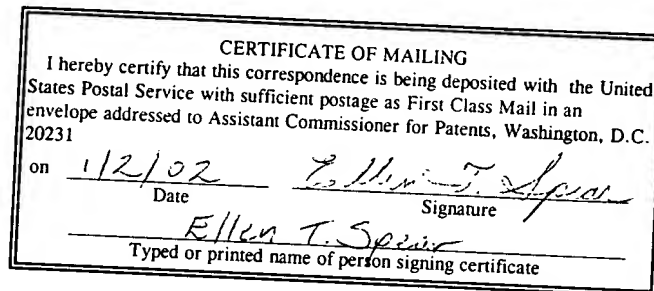
Group Art Unit: 2621

Filed:

November 12, 2001

Title:

METHOD AND SYSTEM FOR OBJECT DETECTION IN DIGITAL IMAGES



INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

**RECEIVED**  
FEB 05 2002  
Technology Center 2600

Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.129(a), or  
(First/Second submission after Final Rejection)
- ☒ under 37 CFR 1.97(b), or  
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☐ under 37 CFR 1.97(c) together with either:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, or
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, and
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):  
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.  
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2002

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
- ☒ Copies of the cited references are enclosed.
- ☐ Copies of cited references are enclosed except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☐ The "concise explanation" requirement (non-English references) for reference(s) [ ] under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
  - ☐ the explanation provided in the Specification.
  - ☐ submission of the enclosed International Search Report.
  - ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
  - ☐ the enclosed English language abstract.

☐ Applicant requests that the following non-published pending applications be considered:

Examiner's  
Initials

\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]  
 \_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]  
 \_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_  
Examiner

\_\_\_\_  
Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[ ]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By J. Scott Southworth  
 J. Scott Southworth

Registration No.: 39,382  
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Concord, MA 01742-9133  
 Dated: January 2, 2002

PTO-1449 REPRODUCED

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

October 22, 2001

(Use several sheets if necessary)

ATTORNEY DOCKET NO.  
0918.2040-001

APPLICATION NO.  
09/992,791

APPLICANT  
Michael Jeffrey Jones and Paul Viola

FILING DATE  
November 12, 2001

GROUP  
2621

U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
AA						
AB						
AC						
AD						
AE						
AF						
AG						

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FEB 05 2002  
Technology Center 2600

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
AL					
AM					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Papageorgiou, C.P., et al., "A General Framework for Object Detection," Proceedings of International Conference on Computer Vision, Bombay, India (1998, January) (8 pages).
AS	Freund, Y., et al., "Experiments with a New Boosting Algorithm," Machine Learning: Proceedings of the Thirteenth International Conference (1996) (9 pages).
AT	Schneiderman, H., et al., "A Statistical Method for 3D Object Detection Applied to Faces and Cars," IEEE, Conference on Computer Vision and Pattern Recognition, Hilton Head, South Carolina (2000, June) (6 pages).
AU	Romdhani, S., et al., "Computationally Efficient Face Detection," Proceedings Eighth IEEE International Conference on Computer Vision, Vancouver, BC 11: 695-700 (2001, July).
AV	Rowley, H.A., et al., "Neural Network-Based Face Detection," IEEE Transactions on Pattern Analysis and Machine Intelligence, 20(1): 23-38 (1998).
AW	Sung, K.K., "Example-Based Learning for View-Based Human Face Detection," IEEE Transactions on Pattern Analysis and Machine Intelligence, 20(1): 39-50 (1998).
AX	Amit, Y., et al., "A Computational Model for Visual Selection," 1-35, Department of Statistics, University of Chicago (1998, February).

EXAMINER

DATE CONSIDERED